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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,109	10/25/2000	Juergen Bauer	510553.92128	4150

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EXAMINER

DOVE, TRACY MAE

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 02/05/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-10

Office Action Summary

Application No.
09/696,109

Applicant(s)
Bauer et al.

Examiner
Tracy Dove

Art Unit
1745



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 28, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-90 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7 6) ☐ Other:

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DETAILED ACTION

This Office Action is in response to the communication filed on 10/28/02. Applicant's arguments have been considered, but are moot in view of the new grounds of rejection. New claims 51-90 are rejected in view of the prior art and claims 1-50 have been canceled.

Drawings

The proposed drawing correction filed on 10/28/02 has been disapproved because it is not in the form of a pen-and-ink sketch showing changes in red ink or with the changes otherwise highlighted. See MPEP § 608.02(v). Page 2 of the amendment states "replace informal FIGURES 1-12 with proposed *amended* FIGURES 1-12". Applicant has not provided drawings showing the changes in red ink.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 51-90 are rejected under the judicially created doctrine of double patenting over claims 1-33 of U. S. Patent No. 6,117,594 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: both the application and the patent claim a grid supporting structure having an active material pasted thereto. The grid comprises a lead-based alloy consisting essentially of lead, tin, calcium and silver.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See also MPEP § 804.

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Claims 51-90 are provisionally rejected under the judicially created doctrine of double patenting over claims 30-71 of copending Application No. 09/627,522. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: both the instant application and the copending application claim a grid supporting structure having an active material pasted thereto. The grid comprises a lead-based alloy consisting essentially of lead, tin, calcium and silver.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See also MPEP § 804.

Claim Objections

Claim 78 is objected to because of the following informalities: in line 1 it is suggested that "of a type" be deleted. Appropriate correction is required.

Claims 68 and 82 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

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Claim 79 is objected to because it depends from a canceled claim (claim 26).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 51-90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 51-53, 55, 64-66, 68, 78-80 and 82 recite the phrases “greater than about” and “less than about”, which are indefinite. The use of the phrases “greater than about” and “less than about” is unclear. For example, claim 51 recites “tin in an amount of greater than about 0.5 percent”. While 0.45% may be considered “about 0.5 percent”, 0.45% is not “greater than 0.5 percent”. Thus, it is unclear if the claim encompasses, for example, 0.45% of tin in the lead alloy.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

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- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 51-90 are rejected under 35 U.S.C. 102(e) as being anticipated by Larsen et al., US 5,948,566.

Larsen teaches a sealed lead-acid battery (col. 11, lines 35-39) having a positive plate, a negative plate and a separator between the plates (col. 8, lines 20-36). An active material paste is applied to a grid supporting structure to form the positive plate (col. 7, lines 24-43). The positive grid alloy comprises a lead-based calcium-tin-silver alloy in which, based upon the total weight of the alloy, calcium is present in a range of from about 0.01% to 0.06%, tin is present in a range of from about 0.3% to 1.0% and silver is present in a range of about 0.01% to 0.06%. Note the ratio of tin to calcium may be greater than 20:1. Optionally, aluminum can be included in an amount from about 0.003% to 0.010%. See col. 11, lines 7-14.

Thus, the claims are anticipated.

Claims 51, 55-64, 68-78 and 82-90 are rejected under 35 U.S.C. 102(e) as being anticipated by Larsen, US 6,423,451.

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Larsen teaches a sealed lead-acid cell having a container, a positive plate, a negative plate and a separator between the positive and negative plate (col. 8, lines 30-42). The positive plate comprises a grid and a positive active material pasted onto the grid (col. 8, lines 8-12). Larsen teaches that the grid supporting structure comprises a lead-based alloy consisting essentially of lead, from about 0.02% to about 0.05% calcium, from about 1.5% to about 3.0% tin and from about 0.01% to about 0.05% of silver (see abstract). Note the tin to calcium ratio is greater than 20:1. Optionally, the alloys can include from about 0.003% to 0.03% by weight of aluminum (col. 5, lines 8-9).

Table 4 teaches a specific lead based alloy grid having 2.0% tin, 0.006% silver, 0.040% calcium and the balance lead. Note the alloy (Alloy E) has a ratio of tin to calcium of 50:1 (2/0.04). Thus, Larsen provides a specific teachings in the recited ranges of the claimed invention (at least claims 51, 64 and 78).

Thus, the claims are anticipated.

Response to Arguments

Applicant's arguments with respect to claims 51-90 have been considered but are moot in view of the new ground(s) of rejection.

Note at the bottom of page 8-top of page 9 of the amendment, Applicant states claims 65-77 depend from claim 64. However, claims 65-77 actually depend from claim 62. Likewise,

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claims 79-90 do not depend from independent claim 78. Independent claims 64 and 78 do not have any dependent claims.

Applicant has requested the double patenting rejection be held in abeyance until allowable claims are indicated by the Examiner. No further arguments are provided regarding the double patenting rejection.

The prior art rejections in view of Rao, U.S. 5,298,350, and/or Rao, U.S. 5,874,186 have been withdrawn.

The indication of allowable subject matter (silver content is in the range of from 0.005-0.012%) has been withdrawn due to newly found prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is (703) 308-8821. The Examiner may normally be reached Monday-Thursday (9:00 AM-7:30 PM). My supervisor is Pat Ryan, who can be reached at (703) 308-2383. The Art Unit receptionist can be reached at (703) 308-0661 and the official fax numbers are 703-872-9310 (after non-final) and 703-872-9311 (after final).

January 29, 2003


Patrick Ryan
Supervisory Patent Examiner
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